UNITED STATES DEPARTMENT OF THE INTERIOR BUREAU OF LAND MANAGEMENT

DETRMINATION OF NEPA ADEQUACY

DETERMINATION OF NEPA
ADEQUACY OF OFFERING FOR LEASE
8PARCELS FOR FEDERAL OIL AND
GAS MINERALS

DOI-BLM-UT-G010-2018-0046-DNA

April, 2018

Vernal Field Office 170 South 500 East Vernal, Utah 84078 435-781-4400 435-781-4410



EVALUATION OF 8 LEASE PARCELS

DETERMINATION OF NEPA ADEQUACY

DOI-BLM-UT-G010-2018-0046-DNA

The signed CONCLUSION at the end of this worksheet is part of an interim step in the BLM's internal analysis process and does not constitute an appealable decision; however, it constitutes an administrative record to be provided as evidence in protest, appeals and legal procedures.

INTRODUCTION

Office: Vernal Field Office

Lease/Serial/Case File No:

Applicant:

Location of Proposed Action: Duchesne County

Description of Proposed Action: To offer 8 lease parcels in Utah's June 2018 lease sale. These 8 parcels were offered in Utah's December 2017 lease sale. All 8 parcels were successfully bid upon; however, the necessary payments were not made timely and the bids were rejected. Pursuant to 43 C.F.R. § 3120.5-3(c), the Bureau of Land Management (BLM) is reoffering these parcels in Utah's June 2018 lease sale. The 8 parcels are UT1217-031B, UT1217-032, UT1217-033, UT1217-034, UT1217-035, UT1217-038, UT1217-039, and UT1217-041 Appendices B, C, D, have the parcel description, lease stipulations and notices, lease stipulations and notices description, and maps.

LAND USE PLAN CONFORMANCE

Land Use Plan Name: Vernal Resource Management Plan

Date Approved/Amended: October, 2008

The proposed action is in conformance with the applicable Land Use Plan (LUP) because it is specifically provided for in the following LUP decision(s):

MIN-10: Approximately 750,131 acres will be open to leasing subject to the terms and conditions of the standard lease from.

MIN-11: Approximately 890,280 acres will be open to leasing subject to the moderate constraints, such as TLs and CSU.

MIN-12: Approximately 86,789 acres will be open to leasing subject to major constraints such as No Surface Occupancy (NSO) stipulations

APPLICABLE NEPA DOCUMENTS

NEPA Document Name: Environmental Assessment for the December 2017 Oil and Gas Lease Sale, DOI-BLM-UT-G010-2017-0028-EA

Date Approved: January 9, 2018

Summary of Applicability: These parcels were previously analyzed through the above EA.

NEPA Document Name: Vernal Resource Management Plan Final Environmental Impact Statement

Date Approved: October, 2008

Summary of Applicability: The EIS analyzed the impacts of leasing and development in the Vernal Planning Area.

OTHER APPLICABLE DOCUMENTS

Other Document Name: Vernal Resource Management Plan (Vernal RMP)

Date Approved (if any): October, 2008

Summary of Applicability: The Vernal RMP provides guidance on the leasing of minerals in the Vernal Planning Area.

NEPA ADEQUACY CRITERIA

1. Is the new proposed action a feature of, or essentially similar to, an alternative analyzed in the existing NEPA document(s)? Is the project within the same analysis area, or if the project location is different, are the geographic and resource conditions sufficiently similar to those analyzed in the existing NEPA document(s)? If there are differences, can you explain why they are not substantial? **Yes**

Documentation of answer and explanation:

The 8 lease parcels are a feature of the selected alternative of Environmental Assessment DOI-BLM-UT-G010-2017-0028-EA. There are no changes to the parcels sizes or stipulations and lease notices.

2. Is the range of alternatives analyzed in the existing NEPA document(s) appropriate with respect to the new proposed action (or existing proposed action), given current environmental concerns, interests, and resource values? **Yes**

Documentation of answer and explanation:

The alternatives in DOI-BLM-UT-G010-2017-0028-EA were the proposed action (to lease 68 parcels, including all eight re-offered parcels) and no action (not lease any of the parcels). Based on public and internal review of the original EA proposal and that no additional alternatives have been identified under this new review. The range of alternatives analyzed is still appropriate. Inspection of current GIS data indicates that the analysis of all other resources in the previous NEPA document (DOI-BLM-UT-G010-2017-0028-EA) is adequate because there have been no changes in resource information and data.

3. Is existing analysis adequate in light of any new information or circumstances (such as, rangeland health standards assessment; recent endangered species listings, updated list of BLM sensitive species)? Can you reasonably conclude that new information and new circumstances would not substantially change the analysis of the new proposed action? **Yes**

Documentation of answer and explanation:

Inspection of current GIS data by the interdisciplinary team indicates that the analysis of all other resources in the previous NEPA document (DOI-BLM-UT-G010-2017-0028-EA) is adequate because there have been no changes in resource information and data since the previous decision was signed in January 2018. See Appendix A for documentation of the Interdisciplinary (ID) Team review of this proposal.

4. Are the direct, indirect, and cumulative effects that would result from implementation of the new proposed action similar (both quantitatively and qualitatively) to those analyzed in the existing NEPA document? **Yes**

Documentation of answer and explanation:

The direct, indirect, and cumulative effects of the 8 parcels would be the same (both quantitatively and qualitatively) to those analyzed in the disclosed Environmental Assessment DOI-BLM-UT-G010-2017-0028-EA. These eight parcels and the applicable stipulations and leases notices being offered in the June 2018 lease sale are exactly the same as they were under the original EA for the December 2018 leases sale. No changed circumstances have been identified by the ID team review.

5. Are the public involvement and interagency review associated with existing NEPA document(s) adequate for the current proposed action? **Yes**

Documentation of answer and explanation:

The Environmental Assessment DOI-BLM-UT-G010-2017-0028-EA was posted for public comment on June 24, 2017 to July 24, 2017. The BLM received 12,976 form letters. Theses form letters requested deferral of leases near Dinosaur National Monument and within areas with wilderness characteristics. The BLM also received letters from 30 agencies, organizations, and individuals that contained one or more substantive comments. The comments have been summarized and responses were provide in Appendix E of the EA. Also a protest period and an appeal period were given for the EA. The public has had an opportunity to be involved in the NEPA process. To see a table of persons, agencies, and organizations please refer to chapter 5 in the Environmental Assessment DOI-BLM-UT-G010-2017-0028-EA

PLAN CONFORMANCE: X This proposal conforms to the applicable land use plan. This proposal does not conform to the applicable land use plan. DETERMINATION OF NEPA ADEQUACY X Based on the review documented above, I conclude that this proposal conforms to the applicable land use plan and that the NEPA documentation fully covers the proposed action and constitutes BLM's compliance with the requirements of the NEPA. The existing NEPA documentation does not fully cover the proposed action. Additional NEPA documentation is needed if the project is to be further considered. DECISION DOCUMENTATION A new decision will be prepared. X The proposed action is a subset of an existing decision signed on January 9, 2018, therefore no new decision needs to be prepared.

Signatures	
NEPA Coordinator	Date
Authorized Officer	Date

Note: The signed <u>Conclusion</u> on this Worksheet is part of an interim step in the BLM's internal decision process and does not constitute an appealable decision. However, the lease, permit, or other authorization based on this DNA is subject to protest or appeal under 43 CFR Part 4 and the program-specific regulations.

APPENDIX A: INTERDISCIPLINARY TEAM CHECKLIST

INTERDISCIPLINARY TEAM CHECKLIST

RESOURCES AND ISSUES CONSIDERED (INCLUDES SUPPLEMENTAL AUTHORITIES APPENDIX 1 H-1790-1)

Project Title: EVALUATION OF 8 LEASE PARCELS

NEPA Log Number: DOI-BLM-UT-G010-2018-0046-DNA

File/Serial Number:

Project Leader: David Gordon

DETERMINATION OF STAFF: (Choose one of the following abbreviated options for the left column)

NP = not present in the area impacted by the proposed or alternative actions

NI = present, but not affected to a degree that detailed analysis is required

PI = present with potential for relevant impact that need to be analyzed in detail in the EA

NC = (DNAs only) actions and impacts not changed from those disclosed in the existing NEPA documents cited in Section D of the DNA form. The Rationale column may include NI and NP discussions.

Determination	Resource/Issue	Rationale for Determination	Signature	Date
NC	Air Quality & Greenhouse Gas Emissions	Impacts to air quality are anticipated to be exactly the same as disclosed in the original EA. Air quality impacts were described in detail in chapter 4 of the EA. Therefore, no additional analysis is necessary.	Stephanie Howard	4/5/2018
NC	BLM natural areas	There has been no change to the information pertaining to Natural Areas presented in the original EA, the analysis is current and valid.	Rene' Arce	4/12/2018
NC	Cultural: Archaeological Resources	After a recent review of the eight lease parcels it is anticipated that the analysis conducted in Chapter 4 is still valid. There has been no change in the information related to cultural resources.	Tom Milter	4/13/2018
NC	Cultural: Native American Religious Concerns	Analysis conducted for the original EA in Chapter 4 is still valid as it relates to properties important to Native Americans because there have been no changes in the information.	Tom Milter	4/13/2018
NC	Designated Areas: Areas of Critical Environmental Concern	There has been no change to the information pertaining to Areas of Critical and Environmental Concern presented in the original EA, the analysis is current and valid.	Rene' Arce	4/12/2018
NC	Designated Areas: Wild and Scenic Rivers	There has been no change to the information pertaining to Wild and Scenic Rivers presented in the original EA, the analysis is current and valid.	Rene' Arce	4/12/2018
NC	Designated Areas: Wilderness Study Areas	There has been no change to the information pertaining to Wilderness Study Areas presented	Rene' Arce	4/12/2018

Determination	Resource/Issue	Rationale for Determination	Signature	Date
		in the original EA, the analysis is current and valid.		
NC	Environmental Justice	The information in Environmental Assessment DOI-BLM-UT-G010-20017-0028-EA is still correct.	David Gordon	4/4/18
NC	Farmlands (prime/unique)	The information in Environmental Assessment DOI-BLM-UT-G010-20017-0028-EA is still correct.	David Gordon	4/4/18
NI	Fuels/Fire Management	Information for DOI-BLM-UT-G010-20017- 0028-EA is still valid	Blane Tarbell	4/9/2018
NC	Geology / Minerals / Energy Production	Information for DOI-BLM-UT-G010-20017- 0028-EA is still valid	Dallas Nutt	4/9/2018
NC	Invasive Plants / Noxious Weeds / Vegetation	Information and analysis for DOI-BLM-UT-G010-2017-0028-EA is still valid. Invasive Plants/Noxious Weeds: Invasive plant and noxious weed species may be present in the parcels proposed for leasing. The act of leasing would not introduce or spread invasive plant and noxious weed infestations in the Project Area. Development within leased parcels would require site-specific analysis and mitigation which would be conducted as these projects are proposed. Vegetation: the Proposed Action of leasing the parcels would not result in the removal of native vegetation. Site-specific analysis of vegetation impacts would be conducted after the parcels are leased and projects requiring vegetation removal or disturbance are proposed.	Christine Cimiluca	4/13/2018
NC	Lands/Access	There has been no change to the information pertaining to Lands/Access presented in the original EA, the analysis is current and valid.	Margo Roberts	4/13/2018
NC	Lands with Wilderness Characteristics	There has been no change to the information pertaining to lands with wilderness characteristics presented in the original EA, the analysis is current and valid.	Rene' Arce	4/12/2018
NC	Livestock Grazing & Rangeland Health Standards	The information in Environmental Assessment DOI-BLM-UT-G010-20017-0028-EA is still correct.	Stephanie Howard	4/13/2018
NI	Paleontology	Evaluation of paleontological sensitivity of all geological formations along proposed access roads, pipeline right-of-ways and well sites is requested by the Department of the Interior and the Bureau of Land Management, by the mandates outlined in NEPA, FLPMA, OPLM and the BLM Paleontology Resources Management Manual and Handbook. Spatial analysis was performed on the proposed eight parcels offered in Utah's December 2017 lease sale within T10S R16E, T11S R16E and T11S R15E. There is a potential for Paleontological resources present in T10S R16E Section 1, E2E2 within UTU92667 and T11S R15E, Section 3, E2SE within UTU92666. There	Joseph Islas	4/5/2018

Determination	Resource/Issue	Rationale for Determination has been no changes to related Paleontological resources and surveys should be performed concurrent with future APD submissions and concurrent excavation activities in the listed areas. New fossil discoveries should facilitate the cessation of all excavation activities within the area of discovery, followed by immediate notification of the VFO officer for mitigation	Signature	Date
NC	Plants: BLM Sensitive	procedures. Information and analysis for DOI-BLM-UT-G010-2017-0028-EA is still valid. Graham's cryptantha (<i>Cryptantha grahamii</i>) has been documented near parcel 38, per BLM GIS data review. Suitable habitat for this species is present in parcel 031B, 038, and 039. Applicable lease notices and stipulations: UT-LN-49 Utah Sensitive Species Parcels: 031B, 038, and 039. UT-LN-51 Special Status Species-Not Federally	Christine Cimiluca	4/13/2018
NC	Plants: Threatened, Endangered, Proposed, or Candidate	Information and analysis for DOI-BLM-UT-G010-2017-0028-EA is still valid. Shrubby reed-mustard (Hesperidanthus suffrutescens) potential habitat: UT-1217-031B, 038. Uinta Basin hookless cactus (Sclerocactus wetlandicus) or Pariette cactus (Sclerocactus brevispinus) potential habitat: 031B, 038, and 039. Graham's beardtongue (Penstemon grahamii) plants have been documented near parcel 038, per BLM GIS data review. Suitable habitat for Ute ladies'-tresses (Spiranthes diluvialis) may be present in the Project Area. Applicable lease notices and stipulations: T&E-05 Listed Plant Species UT-1217-031B, 038, and 039. T&E-12 Pariette cactus (Sclerocactus brevispinus) and Uinta Basin hookless cactus (Sclerocactus wetlandicus) UT-1217-031B, 038, and 039. T&E 21 Shrubby reed-mustard (Hesperidanthus suffrutescens/Schoenocrambe suffrutescens) UT-1217-031B, and 038.	Christine Cimiluca	4/13/2018

Determination	Resource/Issue	Rationale for Determination UT-LN-90 Graham's beardtongue (<i>Penstemon grahamii</i>): UT-1217-038	Signature	Date
NC	Recreation	There has been no change to the information pertaining to Recreation presented in the original EA, the analysis is current and valid.	Rene' Arce	4/12/2018
NC	Socio-Economics	The information in Environmental Assessment DOI-BLM-UT-G010-20017-0028-EA is still correct.	David Gordon	4/4/18
NC	Soils: Physical / Biological	The information in Environmental Assessment DOI-BLM-UT-G010-20017-0028-EA is still correct.	David Gordon	4/4/18
NC	Visual Resources	There has been no change to the information pertaining to Visual Resources presented in the original EA, the analysis is current and valid.	Rene' Arce	4/12/2018
NC	Wastes (hazardous/solid)	The information in Environmental Assessment DOI-BLM-UT-G010-20017-0028-EA is still correct.	David Gordon	4/4/18
NC	Water: Groundwater Quality	The information for DOI-BLM-UT-G010-20017-0028-EA is still correct	Dallas Nutt	4/9/2018
NC	Water: Hydrologic Conditions (stormwater)	The information in Environmental Assessment DOI-BLM-UT-G010-20017-0028-EA is still correct.	Peter Kauss	4/6/2018
NC	Water: Municipal Watershed / Drinking Water Source Protection	The information in Environmental Assessment DOI-BLM-UT-G010-20017-0028-EA is still correct.	Peter Kauss	4/6/2018
NC	Water: Steams, Riparian, Wetlands, Floodplains	The information in Environmental Assessment DOI-BLM-UT-G010-20017-0028-EA is still correct.	Jerrad Goodell	4/10/2018
NC	Water: Surface Water Quality	The information in Environmental Assessment DOI-BLM-UT-G010-20017-0028-EA is still correct.	Peter Kauss	4/6/2018
NC	Water: Water Rights	The information in Environmental Assessment DOI-BLM-UT-G010-20017-0028-EA is still correct.	Peter Kauss	4/6/2018
NC	Water: Waters of the U.S.	The information in Environmental Assessment DOI-BLM-UT-G010-20017-0028-EA is still correct.	Peter Kauss	4/6/2018
NC	Wild Horses	The information in Environmental Assessment DOI-BLM-UT-G010-20017-0028-EA is still correct.	Stephanie Howard	4/13/2018
NC	Wildlife: Migratory Birds (including raptors)	Analysis for migratory birds and raptors was fully prepared and presented within the original EA. Impacts to migratory birds were discussed in detail in Chapter 4 of the original EA (DOI-BLM-UT-G010-20017-0028-EA). There have been no changes to migratory birds within the affected area and therefore the original analysis is still valid.	Natasha Hadden	4/11/2018
NC	Wildlife: Fish (designated or non- designated)	The information in Environmental Assessment DOI-BLM-UT-G010-20017-0028-EA is still correct.	Jerrad Goodell	4/10/2018
NC	Wildlife: Greater Sage-Grouse (GRSG)	Analysis for GRSG was fully prepared and presented within the original EA. Impacts to GRSG were discussed in detail in Chapter 4 of the original EA (DOI-BLM-UT-G010-20017-	Leah Lewis	4/6/18

Determination	Resource/Issue	Rationale for Determination 0028-EA). There have been no changes to GRSG within the affected area and therefore the original analysis is still valid.	Signature	Date
NC	Wildlife: Non-USFWS Designated	Analysis for mule deer winter and fawning crucial range, elk winter and fawning crucial range, and white-tailed prairie dog were fully prepared and presented within the original EA. Impacts to these species were discussed in detail in Chapter 4 or the wildlife specialist report in the original EA (DOI-BLM-UT-G010-20017-0028-EA). Pronghorn, reptiles, and amphibians were addressed in the Interdisciplinary Team Checklist. There have been no changes to these species within the affected area and therefore the original analysis is still valid.	Natasha Hadden	4/11/2018
NC	Wildlife: Threatened, Endangered, Proposed or Candidate	Analysis for potential Mexican spotted owl habitat, proposed and potential critical habitat for yellow-billed cuckoo and black-footed ferret were fully prepared and presented within the original EA. Impacts to these species were discussed in detail in the wildlife specialist report of the original EA (DOI-BLM-UT-G010-20017-0028-EA). Consultation with USFWS was also conducted with a finding of may affect, likely to adversely affect. The lease notices and the standard ESA stipulation described in the EA have been applied to the appropriate parcels. No further analysis is required at this stage because FWS determined these lease notices would adequately protect the species at the time of development. There have been no changes to the analysis of these species within the affected area and therefore the original analysis is still valid.	Natasha Hadden	4/11/2018
NC	Woodlands/Forestry	There is no new issue or data pertaining to forest and woodlands from the NEPA documents sited in this DNA	David Palmer	4/5/2018

FINAL REVIEW:

Reviewer Title	Signature	Date	Comments
Environmental Coordinator			
Authorized Officer			

APPENDIX B: PARCEL DESCRIPTIONS, LEASE STIPULATIONS AND NOTICES

BLM Sale ID	Legal Description of	Lease Stipulations and Notices
	Available Parcel	·
UT1217 – 031B	T. 11 S., R. 15 E., Salt Lake Sec. 13: E2. 320.0 Acres Duchesne County, Utah Vernal Field Office	Stipulations UT-S-01: Air Quality UT-S-23: No Surface Occupancy/Controlled Surface Use/Timing Limitations - Nine Mile Canyon ACEC UT-S-96: No Surface Occupancy - Fragile Soils/slopes Greater than 40 % UT-S-99: Controlled Surface Use - Fragile Soils/Slopes UT-S-100: Controlled Surface Use - Fragile Soil/Slopes (21%-40%) UT-S-123: No Surface Occupancy - Riparian, Floodplains, and Public Water Reserves UT-S-247: TL-Crucial Elk Calving and Deer Fawning Habitat UT-S-261: TL-Raptor Buffers UT-S-317: Unit Joinder - Gate Canyon II (UTU90523X)
		Notices T&E-03: Endangered Fish of the Upper Colorado River Drainage Basin T&E-05: Listed Plant Species T&E-12: Pariette Cactus (Sclerocactus Brevispinus) and Uinta Basin hookless cactus [Sclerocactus Glaucus (Brevispinus and Wetlandicus)] T&E-21: Shrubby reed-mustard (Schoenocrambe Suffrutescens) UT-LN-45: Migratory Birds UT-LN-49: Utah Sensitive Species UT-LN-51: Special Status Plants: Not Federally Listed UT-LN-68: Notification & Consultation Regarding Cultural Resources UT-LN-72: High Potential Paleontological Resources UT-LN-83: Site ROWs UT-LN-96: Air Quality Mitigation Measures UT-LN-99: Regional Ozone Formation Controls UT-LN-102: Air Quality Analysis UT-LN-115: Light and Sound UT-LN-128: Floodplain Management
UT1217 – 032	T. 11 S., R. 15 E., Salt Lake Sec. 3: S2NE, S2NW, S2; Sec. 4: All; 1,122.72 Acres Duchesne County, Utah Vernal Field Office	Stipulations UT-S-01: Air Quality UT-S-96: No Surface Occupancy - Fragile Soils/Slopes Greater than 40 % UT-S-99: Controlled Surface Use - Fragile Soils/Slopes UT-S-100: Controlled Surface Use - Fragile Soil/Slopes (21%-40%) UT-S-123: No Surface Occupancy – Riparian, Floodplains, and Public Water Reserves UT-S-247: TL-Crucial Elk Calving and Deer Fawning Habitat UT-S-261: TL-Raptor Buffers Notices T&E-03: Endangered Fish of the Upper Colorado River Drainage Basin T&E-05: Listed Plant Species T&E-22: Ute Ladies'-Tresses (Spiranthes Diluvialis) UT-LN-25: White-tailed and Gunnison Prairie Dog UT-LN-45: Migratory Birds
		UT-LN-49: Utah Sensitive Species UT-LN-68: Notification & Consultation Regarding Cultural Resources UT-LN-72: High Potential Paleontological Resources

BLM Sale ID	Legal Description of Available Parcel	Lease Stipulations and Notices
	Available Fareer	UT-LN-83: Site ROWs UT-LN-96: Air Quality Mitigation Measures UT-LN-99: Regional Ozone Formation Controls UT-LN-102: Air Quality Analysis UT-LN-115: Light and Sound UT-LN-128: Floodplain Management UT-LN-131: Greater Sage-Grouse - Net Conservation Gain UT-LN-132: Greater Sage-Grouse- Required Design Features
UT1217 – 033	T. 10 S., R. 16 E., Salt Lake Sec. 1: All; Sec. 10: SENE, E2SW, SE; Secs. 11 and 12: All. 2,199.60 Acres Duchesne County, Utah Vernal Field Office	Stipulations UT-S-01: Air Quality UT-S-96: No Surface Occupancy - Fragile Soils/Slopes Greater than 40 % UT-S-99: Controlled Surface Use - Fragile Soils/Slopes UT-S-100: Controlled Surface Use - Fragile Soil/Slopes (21%-40%) UT-S-123: No Surface Occupancy – Riparian, Floodplains, and Public Water Reserves UT-S-247: TL-Crucial Elk Calving and Deer Fawning Habitat UT-S-261: TL-Raptor Buffers
		Notices T&E-03: Endangered Fish of the Upper Colorado River Drainage Basin T&E-05: Listed Plant Species T&E-22: Ute Ladies'-Tresses (Spiranthes Diluvialis) UT-LN-25: White-tailed and Gunnison Prairie Dog UT-LN-45: Migratory Birds UT-LN-49: Utah Sensitive Species UT-LN-68: Notification & Consultation Regarding Cultural Resources UT-LN-72: High Potential Paleontological Resources UT-LN-83: Site ROWs UT-LN-96: Air Quality Mitigation Measures UT-LN-99: Regional Ozone Formation Controls UT-LN-115: Light and Sound UT-LN-115: Light and Sound UT-LN-115: Greater Sage-Grouse - Net Conservation Gain
UT1217 – 034	T. 10 S., R. 16 E., Salt Lake Secs. 13, 14 and 15: All; Sec. 23: E2NE, E2SE. 2,080.00 Acres Duchesne County, Utah Vernal Field Office	UT-LN-132: Greater Sage-Grouse- Required Design Features Stipulations UT-S-01: Air Quality UT-S-96: No Surface Occupancy - Fragile Soils/slopes Greater than 40 % UT-S-99: Controlled Surface Use - Fragile Soils/Slopes UT-S-100: Controlled Surface Use - Fragile Soil/Slopes (21%-40%) UT-S-123: No Surface Occupancy - Riparian, Floodplains, and Public Water Reserves UT-S-247: TL-Crucial Elk Calving and Deer Fawning Habitat UT-S-261: TL-Raptor Buffers
		Notices T&E-03: Endangered Fish of the Upper Colorado River Drainage Basin UT-LN-16: Pronghorn Fawning Habitat UT-LN-25: White-tailed and Gunnison Prairie Dog UT-LN-45: Migratory Birds UT-LN-49: Utah Sensitive Species UT-LN-68: Notification & Consultation Regarding Cultural Resources UT-LN-72: High Potential Paleontological Resources UT-LN-83: Site ROWs UT-LN-96: Air Quality Mitigation Measures

BLM Sale ID	Legal Description of Available Parcel	Lease Stipulations and Notices
		UT-LN-99: Regional Ozone Formation Controls UT-LN-102: Air Quality Analysis UT-LN-115: Light and Sound UT-LN-128: Floodplain Management UT-LN-131: Greater Sage-Grouse - Net Conservation Gain UT-LN-132: Greater Sage-Grouse- Required Design Features
UT1217 – 035	T. 10 S., R. 16 E., Salt Lake Sec. 25: N2, N2SW, SESW, SE. 600.00 Acres Duchesne County, Utah Vernal Field Office	Stipulations UT-S-01: Air Quality UT-S-96: No Surface Occupancy - Fragile Soils/slopes Greater than 40 % UT-S-99: Controlled Surface Use - Fragile Soils/Slopes UT-S-100: Controlled Surface Use - Fragile Soil/Slopes (21%-40%) UT-S-123: No Surface Occupancy – Riparian, Floodplains, and Public Water Reserves UT-S-247: TL-Crucial Elk Calving and Deer Fawning Habitat UT-S-261: TL-Raptor Buffers
		Notices T&E-03: Endangered Fish of the Upper Colorado River Drainage Basin UT-LN-25: White-tailed and Gunnison Prairie Dog UT-LN-45: Migratory Birds UT-LN-49: Utah Sensitive Species UT-LN-68: Notification & Consultation Regarding Cultural Resources UT-LN-72: High Potential Paleontological Resources UT-LN-83: Site ROWs UT-LN-96: Air Quality Mitigation Measures UT-LN-99: Regional Ozone Formation Controls UT-LN-102: Air Quality Analysis UT-LN-115: Light and Sound UT-LN-115: Greater Sage-Grouse - Net Conservation Gain UT-LN-131: Greater Sage-Grouse- Required Design Features
UT1217 - 038	T. 11 S., R. 16 E., Salt Lake Sec. 1: All; Sec. 11: S2; Sec. 12: W2; Sec. 13: N2NE, N2NW, 1,434,48 Acres Duchesne County, Utah Vernal Field Office	Stipulations H-3120: Endangered Species Act Stipulation UT-S-01: Air Quality UT-S-23: No Surface Occupancy/Controlled Surface Use/Timing Limitations - Nine Mile Canyon ACEC UT-S-96: No Surface Occupancy - Fragile Soils/slopes Greater than 40 % UT-S-99: Controlled Surface Use - Fragile Soils/Slopes UT-S-100: Controlled Surface Use - Fragile Soil/Slopes (21%-40%) UT-S-123: No Surface Occupancy - Riparian, Floodplains, and Public Water Reserves UT-S-247: TL-Crucial Elk Calving and Deer Fawning Habitat UT-S-261: TL-Raptor Buffers Notices T&E-03: Endangered Fish of the Upper Colorado River Drainage Basin T&E-05: Listed Plant Species T&E-12: Pariette Cactus (Sclerocactus Brevispinus) and Uinta Basin hookless cactus [Sclerocactus Glaucus (Brevispinus and Wetlandicus)] T&E-21: Shrubby reed-mustard (Schoenocrambe Suffrutescens) UT-LN-25: White-tailed and Gunnison Prairie Dog UT-LN-45: Migratory Birds UT-LN-49: Utah Sensitive Species UT-LN-51: Special Status Plants: Not Federally Listed

T. 11 S., R. 16 E., Salt Lake Sec. 6: Lots 1-7, 2NE, SENW; Sec. 7: All. 153.78 Acres Ouchesne County, Utah Vernal Field Office	UT-LN-72: High Potential Paleontological Resources UT-LN-83: Site ROWs UT-LN-90: Graham's Beardtongue (Penstemon Grahamii) UT-LN-96: Air Quality Mitigation Measures UT-LN-99: Regional Ozone Formation Controls UT-LN-102: Air Quality Analysis UT-LN-115: Light and Sound UT-LN-128: Floodplain Management UT-LN-131: Greater Sage-Grouse - Net Conservation Gain UT-LN-132: Greater Sage-Grouse- Required Design Features Stipulations H-3120: Endangered Species Act Stipulation UT-S-01: Air Quality UT-S-23: No Surface Occupancy/Controlled Surface Use/Timing Limitations - Nine Mile Canyon ACEC UT-S-96: No Surface Occupancy - Fragile Soils/Slopes Greater than 40 % UT-S-99: Controlled Surface Use - Fragile Soil/Slopes UT-S-100: Controlled Surface Use - Fragile Soil/Slopes (21%-40%) UT-S-123: No Surface Occupancy - Riparian, Floodplains, and Public Water Reserves UT-S-247: TL-Crucial Elk Calving and Deer Fawning Habitat UT-S-261: TL - Raptor Buffers
Sec. 6: Lots 1-7, 2NE, SENW; Sec. 7: All. 53.78 Acres Duchesne County, Utah	H-3120: Endangered Species Act Stipulation UT-S-01: Air Quality UT-S-23: No Surface Occupancy/Controlled Surface Use/Timing Limitations - Nine Mile Canyon ACEC UT-S-96: No Surface Occupancy - Fragile Soils/Slopes Greater than 40 % UT-S-99: Controlled Surface Use - Fragile Soils/Slopes UT-S-100: Controlled Surface Use - Fragile Soil/Slopes (21%-40%) UT-S-123: No Surface Occupancy - Riparian, Floodplains, and Public Water Reserves UT-S-247: TL-Crucial Elk Calving and Deer Fawning Habitat
	Notices
	T&E-03: Endangered Fish of the Upper Colorado River Drainage Basin T&E-05: Listed Plant Species T&E-12: Pariette Cactus (Sclerocactus Brevispinus) and Uinta Basin hookless cactus [Sclerocactus Glaucus (Brevispinus and Wetlandicus)] UT-LN-25: White-tailed and Gunnison Prairie Dog UT-LN-45: Migratory Birds UT-LN-49: Utah Sensitive Species UT-LN-51: Special Status Plants: Not Federally Listed UT-LN-68: Notification & Consultation Regarding Cultural Resources UT-LN-72: High Potential Paleontological Resources UT-LN-83: Site ROWs UT-LN-96: Air Quality Mitigation Measures UT-LN-99: Regional Ozone Formation Controls UT-LN-102: Air Quality Analysis UT-LN-115: Light and Sound UT-LN-115: Greater Sage-Grouse - Net Conservation Gain
Sec. 30: Lot 4; Sec. 31: Lots 1-4, Sec. 31: Lots 1-4, Sec. 32: Lots 1-4, Sec. 31: Lots 1-	UT-LN-132: Greater Sage-Grouse- Required Design Features Stipulations H-3120: Endangered Species Act Stipulation UT-S-01: Air Quality UT-S-96: No Surface Occupancy - Fragile Soils/slopes Greater than 40 % UT-S-99: Controlled Surface Use - Fragile Soils/Slopes UT-S-100: Controlled Surface Use - Fragile Soil/Slopes (21%-40%) UT-S-123: No Surface Occupancy - Riparian, Floodplains, and Public Water Reserves UT-S-247: TL-Crucial Elk Calving and Deer Fawning Habitat UT-S-261: TL - Raptor Buffers
	Sec. 30: Lot 4; Sec. 31: Lots 1-4, 2NW, E2SW. 59.20 Acres uchesne County, Utah

BLM Sale ID	Legal Description of Available Parcel	Lease Stipulations and Notices
		T&E-03 : Endangered Fish of the Upper Colorado River Drainage Basin
		UT-LN-25: White-tailed and Gunnison Prairie Dog
		UT-LN-45: Migratory Birds
		UT-LN-49: Utah Sensitive Species
		UT-LN-68: Notification & Consultation Regarding Cultural Resources
		UT-LN-72: High Potential Paleontological Resources
		UT-LN-83: Site ROWs
		UT-LN-96: Air Quality Mitigation Measures
		UT-LN-99: Regional Ozone Formation Controls
		UT-LN-102: Air Quality Analysis
		UT-LN-115: Light and Sound
		UT-LN-128: Floodplain Management
		UT-LN-131: Greater Sage-Grouse - Net Conservation Gain
		UT-LN-132: Greater Sage-Grouse- Required Design Features
		UT-LN-133: Greater Sage-Grouse- Buffer

Number	Utah Lease Stipulations
H-3120-1	The Cultural Resources Protection and Endangered Species Act
	Stipulations from the Competitive Leasing Handbook will be attached to
	all leases.
UT-S-01	AIR QUALITY
	All new and replacement internal combustion gas field engines of less than
	or equal to 300 design-rated horsepower shall not emit more than 2 grams
	of NO _x per horsepower-hour.
	Exception: This requirement does not apply to gas field engines of less
	than or equal to 40 design-rated horsepower.
	Modification: None
	Waiver: None
	AND
	All new and replacement internal combustion gas field engines of greater
	than 300 design rated horsepower must not emit more than 1.0 gram of
	NO _x per horsepower-hour.
	Exception: None
	Modification: None
	Waiver: None
UT-S-23	NO SURFACE OCCUPANCY/CONTROLLED SURFACE
	USE/TIMING LIMITATIONS – NINE MILE CANYON ACEC
	No surface occupancy for oil and gas leasing within approximately 17,162
	acres, and approximately 209 acres will be open to leasing subject to
	moderate constraints such as timing limitations and controlled surface use.
	Exception: None
	Modification: None
	Waiver: None
UT-S-96	NO SURFACE OCCUPANCY – FRAGILE SOILS/SLOPES
	GREATER THAN 40%
	No surface occupancy for slopes greater than 40 percent.
	Exception: If after an environment analysis the authorized officer
	determines that it would cause undue or unnecessary degradation to pursue
	other placement alternatives; surface occupancy in the NSO area may be
	authorized. Additionally a plan shall be submitted by the operator and
	approved by BLM prior to construction and maintenance and include:
	• An erosion control strategy;
	• GIS modeling;
	Proper survey and design by a certified engineer.
	Modification: Modifications also may be granted if a more detailed
	analysis, i.e. Order I, soil survey conducted by a qualified soil scientist
	finds that surface disturbance activities could occur on slopes greater than
	40% while adequately protecting the area from accelerated erosion.
	Waiver: None
UT-S-99	CONTROLLED SURFACE USE – FRAGILE SOILS/SLOPES

Number	Utah Lease Stipulations
114111111111111111111111111111111111111	The surface operating standards for oil and gas exploration and
	development (Gold Book) shall be used as a guide for surface-disturbing
	proposals on steep slopes/hillsides.
	Exception: None
	Modification: None
	Waiver: None
UT-S-100	CONTROLLED SURFACE USE – FRAGILE SOILS/SLOPES (21%-
	40%)
	If surface-disturbing activities cannot be avoided on slopes from 21-40% a
	plan will be required. The plan will approved by BLM prior to construction
	and maintenance and include:
	• An erosion control strategy;
	• GIS modeling;
	 Proper survey and design by a certified engineer.
	Exception: None
	Modification: None
	Waiver: None
UT-S-123	NO SURFACE OCCUPANCY – RIPARIAN, FLOODPLAINS, AND
	PUBLIC WATER RESERVES
	No new surface-disturbing activities are allowed within active flood plains,
	wetlands, public water reserves, or 100 meters of riparian areas. Keep
	construction of new stream crossings to a minimum.
	Exception: An exception could be authorized if: (a) there are no practical alternatives (b) impacts could be fully mitigated, or (c) the action is
	designed to enhance the riparian resources.
	Modification: None
	Waiver: None
UT-S-247	TIMING LIMITATION – CRUCIAL ELK CALVING AND DEER
01-5-247	FAWNING HABITAT
	In order to protect crucial elk calving and deer fawning habitat exploration,
	drilling, and other development activity will not be allowed from May 15 -
	June 30.
	Exception : This restriction would not apply to maintenance and operation
	of existing facilities. This stipulation may be excepted if either the resource
	values change or the lessee/operator demonstrates to BLMs satisfaction
	that adverse impact can be mitigated.
	Modification: None
	Waiver: None
UT-S-261	TIMING LIMITATION – RAPTOR BUFFERS
	Raptor management will be guided by the use of "Best Management
	Practices for Raptors and Their Associated Habitats in Utah" (Utah BLM,
	2006, Appendix A), utilizing seasonal and spatial buffers, as well as
	mitigation, to maintain and enhance raptor nesting and foraging habitat,
	while allowing other resource uses.
	Exception: None

Number	Utah Lease Stipulations
Number	Would include the following: 1. Completion of a site-specific assessment by a wildlife biologist or other qualified individual. See example (Attachment 1 of the Raptor BMPs in Appendix A) 2. Written documentation by the BLM Field Office Wildlife Biologist, identifying the proposed modification and affirming that implementation of the proposed modification(s) would not affect nest success or the suitability of the site for future nesting. Modification of the "BMPs" would not be recommended if it is determined that adverse impacts to nesting raptors would occur or that the suitability of the site for future nesting would be compromised. 3. Development of a monitoring and mitigation strategy by a BLM biologist, or other raptor biologist. Impacts of authorized activities would be documented to determine if the modifications were implemented as described in the environmental documentation or Conditions of Approval, and were adequate to protect the nest site. Should adverse impacts be identified during monitoring of an activity, BLM would follow an appropriate course of action, which may include cessation or modification of activities that would avoid, minimize or mitigate the impact, or, with the approval of UDWR and the USFWS, BLM could allow the activity to continue while requiring monitoring to determine the full impact of the activity on the affected raptor nest. A monitoring report would be completed and forwarded to UDWR for incorporation into the Natural
	Heritage Program (NHP) raptor database.
	Waiver: None
UT-S-317	UNIT JOINDER
	The successful bidder will be required to join the Gate Canyon II Unit
	Agreement (UTU90523X) or show reason why a joinder should not be required.

NUMBER	UTAH LEASE NOTICES
T&E-03	ENDANGERED FISH OF THE UPPER COLORADO RIVER
	DRAINAGE BASIN
	The Lessee/Operator is given notice that the lands in this parcel contain
	Critical Habitat for the Colorado River fish (bonytail, humpback chub,
	Colorado pike minnow, and razorback sucker) listed as endangered under
	the Endangered Species Act, or these parcels have watersheds that are
	tributary to designated habitat. Critical habitat was designated for the four
	endangered Colorado River fishes on March 21, 1994(59 FR 13374-
	13400). Designated critical habitat for all the endangered fishes includes
	those portions of the 100-year floodplain that contain primary constituent
	elements necessary for survival of the species. Avoidance or use
	restrictions may be placed on portions of the lease. The following

avoidance and minimization measures have been designed to ensure activities carried out on the lease are in compliance with the Endangered Species Act. Integration of and adherence to these measures will facilitate review and analysis of any submitted permits under the authority of this lease. Following these measures could reduce the scope of Endangered Species Act, Section 7 consultation at the permit stage. Current avoidance and minimization measures include the following:

- 1. Surveys will be required prior to operations unless species occupancy and distribution information is complete and available. All surveys must be conducted by qualified individual(s).
- 2. Lease activities will require monitoring throughout the duration of the project. To ensure desired results are being achieved, minimization measures will be evaluated and, if necessary, Section 7 consultation reinitiated.
- 3. Water production will be managed to ensure maintenance or enhancement of riparian habitat.
- 4. Avoid loss or disturbance of riparian habitats.
- 5. Where technically and economically feasible, use directional drilling or multiple wells from the same pad to reduce surface disturbance and eliminate drilling in suitable riparian habitat. Ensure that such directional drilling does not intercept or degrade alluvial aquifers.
- 6. Conduct watershed analysis for leases in designated critical habitat and overlapping major tributaries in order to determine toxicity risk from permanent facilities.
- 7. Implement Appendix B (Hydrologic Considerations for Pipeline Crossing Stream Channels, Technical Note 423).
- 8. Drilling will not occur within 100 year floodplains of rivers or tributaries to rivers that contain listed fish species or critical habitat.
- 9. In areas adjacent to 100-year flood plains, particularly in systems prone to flash floods, analyze the risk for flash floods to impact facilities, and use closed loop drilling, and pipeline burial or suspension according to Appendix B (Hydrologic Considerations for Pipeline Crossing Stream Channels, Technical Note 423, to minimize the potential for equipment damage and resulting leaks or spills.

Water depletions from *any* portion of the Upper Colorado River drainage basin above Lake Powell are considered to adversely affect or adversely modify the critical habitat of the four resident endangered fish species, and must be evaluated with regard to the criteria described in the Upper Colorado River Endangered Fish Recovery Program. Formal consultation with USFWS is required for all depletions. All depletion amounts must be reported to BLM.

Additional measures to avoid or minimize effects to the species may be developed and implemented in consultation with the U.S. Fish and Wildlife Service between the lease sale stage and lease development stage to ensure continued compliance with the ESA.

T&E-05

LISTED PLANT SPECIES

The Lessee/Operator is given notice that the lands in this parcel contain suitable habitat for federally listed plant species under the Endangered Species Act. The following avoidance and minimization measures have been developed to facilitate review and analysis of any submitted permits under the authority of this lease

- 1. Site inventories:
 - a. Must be conducted to determine habitat suitability,
 - b. Are required in known or potential habitat for all areas proposed for surface disturbance prior to initiation of project activities, at a time when the plant can be detected, and during appropriate flowering periods,
 - c. Documentation should include, but not be limited to individual plant locations and suitable habitat distributions, and
 - d. All surveys must be conducted by qualified individuals.
- 2. Lease activities will require monitoring throughout the duration of the project. To ensure desired results are being achieved, minimization measures will be evaluated and, if necessary, Section 7 consultation reinitiated.
- 3. Project activities must be designed to avoid direct disturbance to populations and to individual plants:
 - a. Designs will avoid concentrating water flows or sediments into plant occupied habitat.
 - b. Construction will occur down slope of plants and populations where feasible; if well pads and roads must be sited upslope, buffers of 300 feet minimum between surface disturbances and plants and populations will be incorporated.
 - c. Where populations occur within 300 ft. of well pads, establish a buffer or fence the individuals or groups of individuals during and post-construction.
 - d. Areas for avoidance will be visually identifiable in the field, e.g., flagging, temporary fencing, rebar, etc.
 - e. For surface pipelines, use a 10 foot buffer from any plant locations:
 - f. If on a slope, use stabilizing construction techniques to ensure the pipelines don't move towards the population.
- 4. For riparian/wetland-associated species, e.g. Ute ladies-tresses, avoid loss or disturbance of riparian habitats.
- 5. Ensure that water extraction or disposal practices do not result in change of hydrologic regime.
- 6. Limit disturbances to and within suitable habitat by staying on designated routes.
- 7. Limit new access routes created by the project.

- 8. Place signing to limit ATV travel in sensitive areas.
- 9. Implement dust abatement practices near occupied plant habitat.
- 10. All disturbed areas will be re-vegetated with native species comprised of species indigenous to the area.
- 11. Post construction monitoring for invasive species will be required.
- 12. Where technically and economically feasible, use directional drilling or multiple wells from the same pad to reduce surface disturbance and eliminate drilling in plant habitat. Ensure that such directional drilling does not intercept or degrade alluvial aquifers.
- 13. Lease activities will require monitoring throughout the duration of the project. To ensure desired results are being achieved, minimization measures will be evaluated and, if necessary, Section 7 consultation reinitiated.

Additional measures to avoid or minimize effects to the species may be developed and implemented in consultation with the U.S. Fish and Wildlife Service between the lease sale stage and lease development stage to ensure continued compliance with the Endangered Species Act.

T&E-12

PARIETTE CACTUS (SCLEROCACTUS BREVISPINUS) AND UINTA BASIN HOOKLESS CACTUS [SCLEROCACTUS GLAUCUS (BREVISPINUS AND WETLANDICUS)]

The Lessee/Operator is given notice that the lands in this parcel contain suitable habitat for the Pariette cactus and Uinta Basin hookless cactus, under the Endangered Species Act (ESA). The following avoidance and minimization measures have been developed to facilitate review and analysis of any submitted permits under the authority of this lease.

In order to minimize effects to the federally threatened Pariette cactus and Uinta Basin hookless cactus, the BLM in coordination with the USFWS, developed the following avoidance and minimization measures. Integration of and adherence to these measures will help ensure the activities carried out during oil and gas development (including but not limited to drilling, production, and maintenance) are in compliance with the ESA. For the purposes of this document, the following terms are so defined: Potential habitat is defined as areas which satisfy the broad criteria of the species habitat description; usually determined by preliminary, in-house assessment. Suitable habitat is defined as areas which contain or exhibit the specific components or constituents necessary for plant persistence; determined by field inspection and/or surveys; may or may not contain Uinta Basin hookless cactus. Habitat descriptions can be found in the U.S. Fish and Wildlife Service's 1990 Recovery Plan and Federal Register Notices for the Uinta Basin hookless cactus (http://www.fws.gov/endangered/wildlife.html). Occupied habitat is defined as areas currently or historically known to support Uinta Basin hookless cactus; synonymous with "known habitat."

The following avoidance and minimization measures should be included in the Plan of Development:

- 1. Pre-project habitat assessments will be completed across 100% of the project disturbance area within potential habitat prior to any ground disturbing activities to determine if suitable Pariette cactus and Uinta Basin hookless cactus habitat is present.
- 2. Within suitable habitat, site inventories will be conducted to determine occupancy. Inventories:
 - a. Must be conducted by qualified individual(s) and according to BLM and Service accepted survey protocols,
 - b. Will be conducted in suitable and occupied habitat for all areas proposed for surface disturbance prior to initiation of project activities and within the same growing season, at a time when the plant can be detected, and during appropriate flowering periods:
 - i. *Sclerocactus brevispinus* surveys should be conducted March 15th to June 30th, unless extended by the BLM
 - ii. *Sclerocactus wetlandicus* surveys can be done any time of the year, provided there is no snow cover,
 - c. Will occur within 300' from the edge of the proposed right-of-way for surface pipelines or roads; and within 300' from the perimeter of disturbance for the proposed well pad including the well pad,
 - d. Will include, but not be limited to, plant species lists and habitat characteristics, and
 - e. Will be valid until March 15th the following year for *Sclerocactus brevispinus* and one year from the survey date for *Sclerocactus wetlandicus*.
- 3. Design project infrastructure to minimize impacts within suitable habitat²:
 - a. Reduce well pad size to the minimum needed, without compromising safety,
 - b. Limit new access routes created by the project,
 - c. Roads and utilities should share common right-of-ways where possible,
 - d. Reduce width of right-of-ways and minimize the depth of excavation needed for the road bed; where feasible, use the natural ground surface for the road within habitat,
 - e. Place signing to limit off-road travel in sensitive areas,
 - f. Stay on designated routes and other cleared/approved areas, and
 - g. All disturbed areas will be re-vegetated with native species comprised of species indigenous to the area and non-native species that are not likely to invade other areas.

- 4. Within occupied habitat³, project infrastructure will be designed to avoid direct disturbance and minimize indirect impacts to populations and to individual plants:
 - a. Follow the above (3.) recommendations for project design within suitable habitats.
 - b. Buffers of 300 feet minimum between the edge of the right of way (roads and surface pipelines) or surface disturbance (well pads) and plants and populations will be incorporated,
 - c. Surface pipelines will be laid such that a 300 foot buffer exists between the edge of the right of way and the plants, use stabilizing and anchoring techniques when the pipeline crosses the habitat to ensure the pipelines don't move towards the population,
 - d. Before and during construction, areas for avoidance should be visually identifiable in the field (e.g., flagging, temporary fencing, rebar, etc.),
 - e. Where technically and economically feasible, use directional drilling or multiple wells from the same pad,
 - f. Designs will avoid concentrating water flows or sediments into occupied habitat,
 - g. Place produced oil, water, or condensate tanks in centralized locations, away from occupied habitat, and
 - h. Minimize the disturbed area of producing well locations through interim and final reclamation. Reclaim well pads following drilling to the smallest area possible.
- 5. Occupied Pariette cactus and Uinta Basin hookless cactus habitats within 300' of the edge of the surface pipelines' right-of-ways, 300' of the edge of the roads' right-of-ways, and 100' from the edge of the well pad shall be monitored for a period of three years after ground disturbing activities. Monitoring will include annual plant surveys to determine plant and habitat impacts relative to project facilities. Annual reports shall be provided to the BLM and the USFWS. To ensure desired results are being achieved, minimization measures will be evaluated and may be changed after a thorough review of the monitoring results and annual reports during annual meetings between the BLM and the USFWS.
- 6. Re-initiation of Section 7 consultation with the USFWS will be sought immediately if any loss of plants or occupied habitat for the Pariette cactus and Uinta Basin hookless cactus is anticipated as a result of project activities.
- 7. The lessee will observe the management and conservation measures developed for the Level 1 and 2 Core Conservation Areas that have been identified by the USFWS. These conservation measures include disturbance caps (no further disturbance in Core 1 Areas and a 5% disturbance cap in Core 2 Areas).

Additional site-specific measures may also be employed to avoid or minimize effects to the species. These additional measures will be developed and implemented in consultation with the USFWS to ensure continued compliance with the ESA.

T&E-21

SHRUBBY REED - MUSTARD (SCHOENOCRAMBE SUFFRUTESCENS)

The Lessee/Operator is given notice that the lands in this parcel contain suitable habitat for shrubby reed-mustard under the Endangered Species Act. The following avoidance and minimization measures have been developed to facilitate review and analysis of any submitted permits under the authority of this lease.

In order to minimize effects to the federally endangered shrubby reedmustard, the Bureau of Land Management (BLM) in coordination with the U.S. Fish and Wildlife Service (Service) developed the following avoidance and minimization measures. Integration of and adherence to these measures will help ensure the activities carried out during oil and gas development (including but not limited to drilling, production, and maintenance) are in compliance with the Endangered Species Act (ESA). For the purposes of this document, the following terms are so defined: Potential habitat is defined as areas which satisfy the broad criteria of the species habitat description; usually determined by preliminary, in-house assessment. Suitable habitat is defined as areas which contain or exhibit the specific components or constituents necessary for plant persistence; determined by field inspection and/or surveys; may or may not contain shrubby reed-mustard; habitat descriptions can be found in the Federal Register 52(193):37416-37420 and in the U.S. Fish and Wildlife Service's 1994 Utah Reed-Mustards Recovery Plan

(http://www.fws.gov/endangered/wildlife.html). Occupied habitat is defined as areas currently or historically known to support shrubby reedmustard; synonymous with "known habitat."

The following avoidance and minimization measures should be included in the Plan of Development:

- a. Pre-project habitat assessments will be completed across 100% of the project disturbance area within potential habitat prior to any ground disturbing activities to determine if suitable shrubby reed-mustard habitat is present.
- b. Within suitable habitat, site inventories will be conducted to determine occupancy. Inventories:
- a. Must be conducted by qualified individual(s) and according to BLM and Service accepted survey protocols,
- b. Will be conducted in suitable and occupied habitat for all areas proposed for surface disturbance prior to initiation of project activities and within the same growing season, at a time when the plant can be detected (April 15th to August 1st, unless extended by the BLM),
- c. Will occur within 300 feet from the edge of the proposed rightof-way for surface pipelines or roads; and within 300 feet from the perimeter of disturbance for the proposed well pad including the well pad,

- d. Will include, but not be limited to, plant species lists and habitat characteristics, and
 - e. Will be valid until April 15th the following year.
- c. Design project infrastructure to minimize impacts within suitable habitat:
- a. Reduce well pad size to the minimum needed, without compromising safety,
 - b. Limit new access routes created by the project,
- c. Roads and utilities should share common right-of-ways where possible,
- d. Reduce the width of right-of-ways and minimize the depth of excavation needed for the road bed; where feasible, use the natural ground surface for the road within habitat,
 - e. Place signing to limit off-road travel in sensitive areas, and
 - f. Stay on designated routes and other cleared/approved areas.
- d. Within occupied habitat, project infrastructure will be designed to avoid direct disturbance and minimize indirect impacts to populations and to individual plants:
- a. Follow the above (3.) recommendations for project design within suitable habitats,
- b. Construction of roads will occur such that the edge of the right of way is at least 300' from any plant,
- c. Roads will be graveled within occupied habitat; the operator is encouraged to apply water for dust abatement to such areas from April $15 \, \text{th}$ to May $30 \, \text{th}$ (flowering period); dust abatement applications will be comprised of water only,
- d. The edge of the well pad should be located at least 300 feet away from plants,
- e. Surface pipelines will be laid such that a 300-foot buffer exists between the edge of the right of way and the plants, use stabilizing and anchoring techniques when the pipeline crosses the white shale strata to ensure the pipelines don't move towards the population,
- f. Construction activities will not occur from April $15\,\mbox{\tiny{th}}$ through May $30\mbox{\tiny{th}}$ within occupied habitat,
- g. Before and during construction, areas for avoidance should be visually identifiable in the field, e.g., flagging, temporary fencing, rebar, etc.,
- h. Where technically and economically feasible, use directional drilling or multiple wells from the same pad,
- i. Designs will avoid concentrating water flows or sediments into occupied habitat,
- j. Place produced oil, water, or condensate tanks in centralized locations, away from occupied habitat, and
- k. Minimize the disturbed area of producing well locations through interim and final reclamation. Reclaim well pads following drilling to the smallest area possible.

- 1. All disturbed areas will be re-vegetated with native species comprised of species indigenous to the area and non-native species that are not likely to invade other areas or persist long-term in the habitat.
- e. Occupied shrubby reed-mustard habitats within 300 feet of the edge of the surface pipeline right of ways, 300 feet of the edge of the road right of ways, and 300 feet from the edge of well pads shall be monitored for a period of three years after ground disturbing activities. Monitoring will include annual plant surveys to determine plant and habitat impacts relative to project facilities. Annual reports shall be provided to the BLM and the Service. To ensure desired results are being achieved, minimization measures will be evaluated and may be changed after a thorough review of the monitoring results and annual reports during annual meetings between the BLM and the Service.
- f. Re-initiation of section 7 consultation with the Service will be sought immediately if any loss of plants or occupied habitat for the shrubby reedmustard is anticipated as a result of project activities.

Additional site-specific measures may also be employed to avoid or minimize effects to the species. These additional measures will be developed and implemented in consultation with the U.S. Fish and Wildlife Service to ensure continued compliance with the ESA.

T&E-22

UTE LADIES'-TRESSES (SPIRANTHES DILUVIALIS)

The Lessee/Operator is given notice that the lands in this parcel contain suitable habitat for Ute ladies'-tresses under the Endangered Species Act (ESA). The following avoidance and minimization measures have been developed to facilitate review and analysis of any submitted permits under the authority of this lease. In order to minimize effects to the federally threatened Ute ladies'-tresses, the BLM in coordination with the USFWS, developed the following avoidance and minimization measures. Integration of and adherence to these measures will help ensure the activities carried out during oil and gas development (including but not limited to drilling, production, and maintenance) are in compliance with the ESA.

Ute ladies'-tresses habitat is provided some protection under Executive Orders 11990 (wetland protection) and 11988 (floodplain management), as well as section 404 of the Clean Water Act. For the purposes of this document, the following terms are so defined: Potential habitat is defined as areas which satisfy the broad criteria of the species habitat description; usually determined by preliminary, in-house assessment. Suitable habitat is defined as areas which contain or exhibit the specific components or constituents necessary for plant persistence; determined by field inspection and/or surveys; may or may not contain Ute ladies'-tresses. Habitat descriptions can be found in Recovery Plans and Federal Register Notices for the species at http://www.fws.gov/endangered/wildlife.html. Occupied habitat is defined as areas currently or historically known to support Ute ladies'-tresses; synonymous with "known habitat. Although plants, habitat, or populations may be afforded some protection under these regulatory

mechanisms, the following conservation measures should be included in the Plan of Development:

- a) Pre-project habitat assessments will be completed across 100% of the project disturbance area, including areas where hydrology might be affected by project activities, within potential habitat prior to any ground disturbing activities to determine if suitable Ute ladies'-tresses habitat is present.
- b) Within suitable habitat, site inventories will be conducted to determine occupancy. Inventories:
- a. Must be conducted by qualified individual(s) and according to BLM and USFWS accepted survey protocols,
- b. Will be conducted in suitable and occupied habitat for all areas proposed for surface disturbance or areas that could experience direct or indirect changes in hydrology from project activities,
- c. Will be conducted prior to initiation of project activities and within the same growing season, at a time when the plant can be detected, and during appropriate flowering periods (usually August 1st and August 31st in the Uintah Basin; however, surveyors should verify that the plant is flowering by contacting a BLM or USFWS botanist or demonstrating that the nearest known population is in flower),
- d. Will occur within 300' from the edge of the proposed right-ofway for surface pipelines or roads; and within 300' from the perimeter of disturbance for the proposed well pad including the well pad,
- e. Will include, but not be limited to, plant species lists, habitat characteristics, source of hydrology, and estimated hyroperiod, and
- f. Will be performed for three consecutive years for activities that will result in permanent surface disturbance. If three consecutive years of surveys cannot be performed before the project commences, suitable habitat will be considered occupied habitat.
- c) Design project infrastructure to minimize direct or indirect impacts to suitable habitat both within and downstream of the project area:
 - a. Alteration and disturbance of hydrology will not be permitted,
- b. Reduce well pad size to the minimum needed, without compromising safety,
 - c. Limit new access routes created by the project,
- d. Roads and utilities should share common right-of-ways where possible,
- e. Reduce width of right-of-ways and minimize the depth of excavation needed for the road bed,
- f. Construction and right-of-way management measures should avoid soil compaction that would impact Ute ladies' tresses habitat,
- g. Off-site impacts or indirect impacts should be avoided or minimized (i.e. install berms or catchment ditches to prevent spilled materials from reaching occupied or suitable habitat through either surface or groundwater).
 - h. Place signing to limit off-road travel in sensitive areas,
 - i. Stay on designated routes and other cleared/approved areas, and

- j. All disturbed areas will be re-vegetated with native species approved by USFWS and BLM botanists.
- d) Within occupied habitat, project infrastructure will be designed to avoid direct disturbance and minimize indirect impacts to populations and to individual plants:
- e) Follow the above (#3) recommendations for project design within suitable habitats,
- f) Buffers of 300 feet minimum between right of way (roads and surface pipelines) or surface disturbance (well pads) and plants and populations will be incorporated,
- g) Surface pipelines will be laid such that a 300-foot buffer exists between the edge of the right of way and the plants, using stabilizing and anchoring techniques when the pipeline crosses habitat to ensure the pipelines don't move towards the population,
- h) Before and during construction, areas for avoidance should be visually identifiable in the field (e.g., flagging, temporary fencing, rebar, etc.),
- i) Where technically and economically feasible, use directional drilling or multiple wells from the same pad,
- j) Designs will avoid altering site hydrology and concentrating water flows or sediments into occupied habitat,
- k) Place produced oil, water, or condensate tanks in centralized locations, away from occupied habitat, with berms and catchment ditches to avoid or minimize the potential for materials to reach occupied or suitable habitat, and
- l) Minimize the disturbed area of producing well locations through interim and final reclamation. Reclaim well pads following drilling to the smallest area possible.
- m) Occupied Ute ladies'-tresses habitats within 300' of the edge of the surface pipelines' right-of-ways, 300' of the edge of the roads' right-of-ways, and 300' from the edge of the well pad shall be monitored for a period of three years after ground disturbing activities. Monitoring will include annual plant surveys to determine plant and habitat impacts relative to project facilities. Habitat impacts include monitoring any changes in hydrology due to project related activities. Annual reports shall be provided to the BLM and the USFWS. To ensure desired results are being achieved, minimization measures will be evaluated and may be changed after a thorough review of the monitoring results and annual reports during annual meetings between the BLM and the Service. Additional site-specific measures may also be employed to avoid or minimize effects to the species. These additional measures will be developed and implemented in consultation with U.S. Fish and Wildlife Service to ensure continued compliance with the ESA.

UT-LN-16

PRONGHORN FAWNING HABITAT

The lessee/operator is given notice that lands in this lease have been identified as containing antelope fawning habitat. Exploration, drilling and other development activities may be restricted from May 1 through June

	29 to protect antelope fawning. Modifications may be required in the
	Surface Use Plan of Operations including seasonal timing restrictions to
	protect the species and its habitat.
	WHITE TAILED AND CHANGON DRAIDE DOC
	WHITE-TAILED AND GUNNISON PRAIRIE DOG
	The lessee/operator is given notice that this lease parcel has been
UT-LN-25	identified as containing white-tailed or Gunnison prairie dog habitat.
	Modifications to the Surface Use Plan of Operations may be required in
	order to protect white-tailed or Gunnison prairie dog from surface
	disturbing activities in accordance with the Endangered Species Act and 43 CFR 3101.1-2.
UT-LN-45	MIGRATORY BIRD
U1-LN-45	The lessee/operator is given notice that surveys for nesting migratory
	birds may be required during migratory bird breeding season whenever
	surface disturbances and/or occupancy is proposed in association with
	fluid mineral exploration and development within priority habitats.
	Surveys should focus on identified priority bird species in Utah. Field
	surveys will be conducted as determined by the authorized officer of the
	Bureau of Land Management. Based on the result of the field survey, the
	authorized officer will determine appropriate buffers and timing
	limitations.
UT-LN-49	UTAH SENSITIVE SPECIES
	The lessee/operator is given notice that no surface use or otherwise
	disruptive activity would be allowed that would result in direct
	disturbance to populations or individual special status plant and animal
	species, including those listed on the BLM sensitive species list and the
	Utah sensitive species list. The lessee/operator is also given notice that
	lands in this parcel have been identified as containing potential habitat
	for species on the Utah Sensitive Species List. Modifications to the Surface
	Use Plan of Operations may be required in order to protect these
	resources from surface disturbing activities in accordance with Section 6
	of the lease terms, Endangered Species Act, Migratory Bird Treaty Act and
	43 CFR 3101.1-2.
UT-LN-51	SPECIAL STATUS PLANTS: NOT FEDERALLY LISTED
	The lessee/operator is given notice that lands in this lease have been
	identified as containing special status plants, not federally listed, and their
	habitats. Modifications to the Surface Use Plan of Operations may be
	required in order to protect the special status plants and/or habitat from
	surface disturbing activities in accordance with Section 6 of the lease
TIT I NI CO	terms, Endangered Species Act, and 43 CFR 3101.1-2.
UT-LN-68	NOTIFICATION & CONSULTATION REGARDING CULTURAL RESOURCES
	The lease area may now or hereafter be found to contain historic
	properties and/or resources protected under the National Historic
	Preservation Act (NHPA), the Archaeological Resources Protections Act

	(ARPA), the Native American Graves Protection and Repatriation Act
	(NAGPRA), the American Indian Religious Freedom Act (AIRFA), other
	statues and Executive Order 13007, and which may be of concern to
	Native American tribes, interested parties, and the State Historic
	Preservation Officer (SHPO). BLM will not approve any ground disturbing
	activities as part of future lease operations until it completes applicable
	requirements of the National Historic Preservation Act (NHPA), including
	the completion of any required procedure for notification and
	consultation with appropriate tribe(s) and/or the SHPO. BLM may require
	modifications to exploration and development proposals to further its
	conservation and management objectives on BLM-approved activities
	that are determine to affect or impact historic or cultural properties
	and/or resources.
UT-LN-72	HIGH POTENTIAL PALEONTOLOGICAL RESOURCES
	The lessee/operator is given notice that this lease has been identified as
	containing paleontological resources. Surveys will be required whenever
	surface disturbances and/or occupancy is proposed in association with
	fluid mineral exploration and development within geological strata that
	may contain important paleontological resources. Field surveys will be
	conducted as determined by the authorized officer of the Bureau of Land
	Management. Exploration, drilling and other development activities may
	be restricted based on the result of the field survey; the authorized officer
	will determine appropriate mitigations. Modifications to the Surface Use
	Plan of Operations may be required in accordance with section 6 of the
	lease terms and 43CFR3101.1-2.
UT-LN-83	SITE ROW
	The lessee/operator is given notice that lands in this lease have an
	existing site ROW present. Modifications to the Surface Use Plan of
	Operations may be required or other appropriate mitigation as deemed
	necessary by the BLM Authorized Officer in order to protect the valid
	existing rights.
UT-LN-90	GRAHAM'S BEARDTONGUE (PENSTEMON GRAHAMII)
	In order to minimize effects to the federally proposed Graham's
	beardtongue, the Bureau of Land Management (BLM) in coordination with
	the U.S. Fish and Wildlife Service (Service) developed the following
	avoidance and minimization measures. The following avoidance and
	minimization measures should be included in the Plan of Development:
	1. Pre-project habitat assessments will be completed across 100% of the
	project disturbance area within potential habitati prior to any ground
	disturbing activities to determine if suitable Graham's beardtongue habitat
	is present.
	2. Within suitable habitat3, site inventories will be conducted to determine
	occupancy. Inventories:
	a. Must be conducted by qualified individual(s) and according to BLM
	and Service accepted survey protocols,

- b. Will be conducted in suitable and occupied habitat4 for all areas proposed for surface disturbance prior to initiation of project activities and within the same growing season, at a time when the plant can be detected (usually May 1 to June 30th in the Uinta Basin; however, surveyors should verify that the plant is flowering by contacting a BLM or FWS botanist or demonstrating that the nearest known population is in flower),
- c. Will occur within 300' from the centerline of the proposed right-ofway for surface pipelines or roads; and within 300' from the perimeter of disturbance for the proposed well pad including the well pad,
- d. Will include, but not be limited to, plant species lists and habitat characteristics, and
- e. Will be valid for 3 years from the original survey date until the following year.
- 3. Design project infrastructure to minimize impacts within suitable habitat²:
- a. Reduce well pad size to the minimum needed, without compromising safety,
 - b. Limit new access routes created by the project,
- c. Roads and utilities should share common right-of-ways where possible,
- d. Reduce the width of right-of-ways and minimize the depth of excavation needed for the road bed; where feasible, use the natural ground surface for the road within habitat,
 - e. Place signing to limit off-road travel in sensitive areas, and
 - f. Stay on designated routes and other cleared/approved areas.
- 4. Within occupied habitat⁴, project infrastructure will be designed to avoid direct disturbance and minimize indirect impacts to populations and to individual plants:
- a. Follow the above (3.) recommendations for project design within suitable habitats,
- b. Construction of roads will occur such that the edge of the right of way is at least 300' from any plant,
- c. Roads will be graveled within occupied habitat; the operator is will apply water for dust abatement as needed to such areas from March 15th to October 15th (reproductive period); dust abatement applications will be comprised of water only,
- d. The edge of the well pad should be located at least 300' away from plants,
- e. Surface pipelines will be laid such that a 300 foot buffer exists between the edge of the right of way and the plants, use stabilizing and anchoring techniques when the pipeline crosses the habitat (exposed raw shale knolls and slopes derived from the Parachute Creek and Evacuation Creek members of the geologic Green River Formation) to ensure pipelines don't move towards the population,
- f. Construction activities will not occur from April 15th through May 30th within occupied habitat,

- g. Before and during construction, areas for avoidance should be visually identifiable in the field, e.g., flagging, temporary fencing, rebar, etc.,
- h. Where technically and economically feasible, use directional drilling or multiple wells from the same pad,
- i. Designs will avoid concentrating water flows or sediments into occupied habitat,
- j. Place produced oil, water, or condensate tanks in centralized locations, away from occupied habitat, and
- k. Minimize the disturbed area of producing well locations through interim and final reclamation. Reclaim well pads following drilling to the smallest area possible.
- 5. Occupied Graham's beardtongue habitats within 300' of the edge of the surface pipelines' right-of-ways, 300' of the edge of the roads' right-of-ways, and 300' from the edge of well pads shall be monitored for a period of three years after ground disturbing activities. Monitoring will include annual plant surveys to determine plant and habitat impacts relative to project facilities. Annual reports shall be provided to the BLM and the Service. To ensure desired results are being achieved, minimization measures will be evaluated and may be changed after a thorough review of the monitoring results and annual reports during annual meetings between the BLM and the Service.

Additional site-specific measures may also be employed to avoid or minimize effects to the species. These additional measures will be developed and implemented in consultation with the U.S. Fish and Wildlife Service to ensure continued conservation of the species.

UT-LN-96

AIR QUALITY MITIGATION MEASURES

The lessee is given notice that the Bureau of Land Management (BLM) in coordination with the U.S. Environmental Protection Agency and the Utah Department of Air Quality, among others, has developed the following air quality mitigation measures that may be applied to any development proposed on this lease. Integration of and adherence to these measures may help minimize adverse local or regional air quality impacts from oil and gas development (including but not limited to construction, drilling, and production) on regional ozone formation.

- All internal combustion equipment would be kept in good working order.
- Water or other approved dust suppressants would be used at construction sites and along roads, as determined appropriate by the Authorized Officer.
- Open burning of garbage or refuse would not occur at well sites or other facilities.
- Drill rigs would be equipped with Tier II or better diesel engines.
- Vent emissions from stock tanks and natural gas TEG dehydrators would be controlled by routing the emissions to a flare or similar control device which would reduce emissions by 95% or greater.
- Low bleed or no bleed pneumatics would be installed on separator dump valves and other controllers.

- During completion, flaring would be limited as much as possible. Production equipment and gathering lines would be installed as soon as possible.
- Well site telemetry would be utilized as feasible for production operations.
- Stationary internal combustion engine would comply with the following standards: 2g NOx/bhp-hr for engines <300HP; and 1g NOx/bhp-hr for engines >300HP.

Additional site-specific measures may also be employed to avoid or minimize effects to local or regional air quality. These additional measures will be developed and implemented in coordination with the U.S. Environmental Protection Agency, the Utah Department of Air Quality, and other agencies with expertise or jurisdiction as appropriate based on the size of the project and magnitude of emissions.

UT-LN-99

REGIONAL OZONE FORMATION CONTROLS

To mitigate any potential impact oil and gas development emissions may have on regional ozone formation, the following Best Management Practices (BMPs) would be required for any development projects:

- Tier II or better drilling rig engines
- Stationary internal combustion engine standard of 2g NOx/bhp-hr for engines <300HP and 1g NOx/bhp-hr for engines >300HP
- Low bleed or no bleed pneumatic pump valves
- Dehydrator VOC emission controls to +95% efficiency
- Tank VOC emission controls to +95% efficiency

UT-LN-102

AIR QUALITY ANALYSIS

The lessee/operator is given notice that prior to project-specific approval, additional air quality analyses may be required to comply with the National Environmental Policy Act, Federal Land Policy Management Act, and/or other applicable laws and regulations. Analyses may include dispersion modeling and/or photochemical modeling for deposition and visibility impacts analysis, control equipment determinations, and/or emission inventory development. These analyses may result in the imposition of additional project-specific air quality control measures.

UT-LN-115

LIGHT AND SOUND

In accordance with the Vernal RMP Decision MIN-5, the BLM will seek to minimize light and sound pollution within the project area using the best available technology such as installation of multi-cylinder pumps, hospital sound reducing mufflers, and placement of exhaust systems to direct noise away from noise sensitive areas (e.g., sensitive habitat, campgrounds, river corridors, and Dinosaur National Monument). Light pollution will be mitigated by using methods such as limiting height of light poles, timing of lighting operations (meaning limiting lighting to times of darkness associated with drilling and work over or maintenance operations), limiting wattage intensity, and constructing light shields. If a

	determination is made that natural barriers or view sheds will meet these
	mitigation objectives, the above requirements may not apply.
UT-LN-128	FLOODPLAIN MANAGEMENT
	The lessee/operator is given notice that, in accordance with Executive
	Order 11988, to avoid adverse impact to floodplains 1) facilities should be
	located outside the 100 year floodplain, or 2) would be minimized or
	mitigated by modification of surface use plans within floodplains present
	within the lease.
UT-LN-131	GREATER SAGE-GROUSE – NET CONSERVATION GAIN
	In Priority and General Habitat Management Areas (PHMA and GHMA) all
	actions that result in habitat loss and degradation will require mitigation
	that provides a net conservation gain to the Greater Sage-Grouse (GRSG).
	Mitigation must account for any uncertainty associated with the
	effectiveness of the mitigation and will be achieved through avoiding,
	minimizing and compensating for impacts. Mitigation will be conducted
	according to the mitigation framework found in Appendix F in the Utah
	Approved Management Plan Amendment.
UT-LN-132	GREATER SAGE-GROUSE – REQUIRED DESIGN FEATURES
	Apply the Required Design Features (RDF)* in Appendix C of the Utah
	Approved Management Plan Amendment when leasing within Priority and
	General Habitat Management Areas (PHMA and GHMA).
	*RDFs may not be required if it is demonstrated through the NEPA
	analysis that the RDF associated project/activity is:
	• Documented to not be applicable to the site-specific conditions of the
	project/activity (e.g. due to site limitations or engineering considerations).
	Economic considerations, such as increased costs, do not necessarily
	require that an RDF be varied or rendered inapplicable;
	• An alternative RDF, state-implemented conservation measure, or plan-
	level protection is determined to provide equal or better protection for GRSG or its habitat;
	Provide no additional protection to GRSG or its habitat.
UT-LN-133	GREATER SAGE-GROUSE - BUFFER
01-LN-133	In Priority and General Habitat Management Areas (PHMA and GHMA),
	the BLM will apply the lek buffer-distances identified in the USGS Report
	Conservation Buffer Distance Estimates for Greater Sage-Grouse – A
	Review (Open File Report 2014-1239) in accordance with Appendix B,
	Applying Lek-Buffer Distances, consistent with valid and existing rights
	and applicable law in authorizing management actions.
	and applicable law in authorizing management actions.



2018 DNA Parcels

















